WHAT IS CLAIMED IS:

1. A lubricant comprising at least one trimetasphere.

2. The lubricant of claim 1, wherein the at least one trimetasphere has a water contact angle of between about 106 and about 112.

3. The lubricant of claim 1, wherein the at least one trimetasphere is stable at temperatures up to about 750°F in air and up to about 2300°F in a vacuum.

4. The lubricant of claim 1, wherein the lubricant is a dry or wet lubricant.

5. The lubricant of claim 6, wherein when the lubricant is a dry lubricant, the lubricant further comprises at least one member selected from the group consisting of a graphite, a metal dichalogenide, MX_2 (wherein M = molybdenum or tungsten and X = sulphur or selenium), MoS_2, PTFE, a metal powder, talc, molybdenum disulfide, tungsten disulfide, niobium disulfide, boron nitride, ditelluride, diselenide of a Group V or VI metal and combinations thereof.

6. The lubricant of claim 4, wherein when the lubricant is a wet lubricant the lubricant further comprises at least one member selected from the group consisting of an organic fluid and a mixture of organic fluids.

7. A method of making a lubricant, the method comprising forming the lubricant so that it comprises at least one trimetasphere.

8. The method of claim 7, wherein the at least one trimetasphere has a water contact angle of between about 106 and about 112.

9. The method of claim 7, wherein the at least one trimetasphere is stable at temperatures up to about 750°F in air and up to about 2300°F in a vacuum.

10. The method of claim 7, wherein the lubricant is a dry or wet lubricant.

11. The method of claim 10, wherein when the lubricant is a dry lubricant the lubricant further comprises at least one member selected from the group consisting of a graphite, a metal dichalogenide, MX_2 (wherein M = molybdenum or tungsten and X = sulphur or selenium), MoS_2, PTFE, a metal powder, talc, molybdenum disulfide, tungsten disulfide, niobium disulfide, boron nitride, ditelluride, diselenide of a Group V or VI metal and combinations thereof.

12. The lubricant of claim 10, wherein when the lubricant is a wet lubricant the lubricant further comprises at least one member selected from the group consisting of an organic fluid and a mixture of organic fluids.

13. A method of lubricating an article, the method comprising applying a lubricant comprising at least one trimetasphere to the article.

14. The method of claim 13, wherein the at least one trimetasphere has a water contact angle of between about 106 and about 112.

15. The method of claim 13, wherein the at least one trimetasphere is stable at temperatures of up to about 750°F in air and up to about 2300°F in a vacuum.

16. The method of claim 13, wherein the lubricant is a dry or wet lubricant.

17. The method of claim 16, wherein when the lubricant is a dry lubricant, the lubricant further comprises at least one member selected from the group consisting of a graphite, a metal dichalogenide, MX_2 (wherein M = molybdenum or tungsten and X = sulphur or selenium), MoS_2, PTFE, a metal

powder, talc, molybdenum disulfide, tungsten disulfide, niobium disulfide, boron nitride, ditelluride, diselenide of a Group V or VI metal and combinations thereof.

18. The lubricant of claim 16, wherein when the lubricant is a wet lubricant the lubricant further comprises at least one member selected from the group consisting of an organic fluid and a mixture of organic fluids.

19. A lubricant additive comprising at least one trimetasphere.

20. The additive of claim 19, wherein the at least one trimetasphere has a water contact angle of between about 106 and about 112.

21. The additive of claim 19, wherein the at least one trimetasphere is stable at temperatures up to about 750°F in air and up to about 2300°F in a vacuum.

22. The additive of claim 19, wherein the additive is formulated so that it can be added to a wet or dry lubricant.

23. The additive of claim 22, wherein when the lubricant is selected from the group consisting of a graphite, a metal dichalogenide, MX_2 (wherein M = molybdenum or tungsten and X = sulphur or selenium), MoS_2, PTFE, a metal powder, talc, molybdenum disulfide, tungsten disulfide, niobium disulfide, boron nitride, ditelluride, diselenide of a Group V or VI metal and combinations thereof.

24. The lubricant of claim 22, wherein when the lubricant is a wet lubricant the lubricant further comprises at least one member selected from the group consisting of an organic fluid and a mixture of organic fluids.

25. A method of making a lubricant additive, the method comprising formulating the additive to comprise at least one trimetasphere.

26. The method of claim 25, wherein the at least one trimetasphere has a water contact angle of between about 106 and about 112.

27. The method of claim 25, wherein the at least one trimetasphere is stable at temperatures up to about 750°F in air and up to about 2300°F in a vacuum.

28. The method of claim 25, wherein the additive is formulated for use in a wet or dry lubricant.

29. The method of claim 28, wherein when the lubricant is a dry lubricant, the lubricant further comprises at least one member selected from the group consisting of a graphite, a metal dichalogenide, MX_2 (wherein M = molybdenum or tungsten and X = sulphur or selenium), MoS_2, PTFE, a metal powder, talc, molybdenum disulfide, tungsten disulfide, niobium disulfide, boron nitride, ditelluride, diselenide of a Group V or VI metal and combinations thereof.

30. The lubricant of claim 28, wherein when the lubricant is a wet lubricant the lubricant further comprises at least one member selected from the group consisting of an organic fluid and a mixture of organic fluids.

31. A method of lubricating an article, the method comprising applying a lubricant additive comprising at least one trimetasphere to the article.

32. A lubricant coating comprising the lubricant of claim 1.

33. A lubricant coating comprising the lubricant additive of claim 19.

34. A corrosion-resistant coating comprising at least one trimetasphere.

35. The coating of claim 34, wherein the at least one trimetasphere has a water contact angle of between about 106 and about 112.

36. The coating of claim 34, wherein the at least one trimetasphere is stable at temperatures up to about 750°F in air and up to about 2300°F in a vacuum.

37. A corrosion-resistant article, coated with the corrosion-resistant coating of claim 34.

38. A method of inhibiting corrosion of an article, the method comprising applying at least one trimetasphere to the article.

39. The method of claim 38, wherein the at least one trimetasphere has a water contact angle of between about 106 and about 112.

40. The method of claim 38, wherein the at least one trimetasphere is stable at temperatures up to about 750°F in air and up to about 2300°F in a vacuum.

41. A thermally-conductive material comprising at least one trimetasphere.

42. The material of claim 41, wherein the at least one trimetasphere has a water contact angle of between about 106 and about 112.

43. The material of claim 41, wherein the at least one trimetasphere is stable at temperatures up to about 750°F in air and up to about 2300°F in a vacuum.

44. The material of claim 41, wherein the at least one trimetasphere exhibits a thermal conductivity of about 0.4 W/mK at about 300 K.

45. A method of making a thermally-conductive material, the method comprising forming the material so that the material comprises at least one trimetasphere.